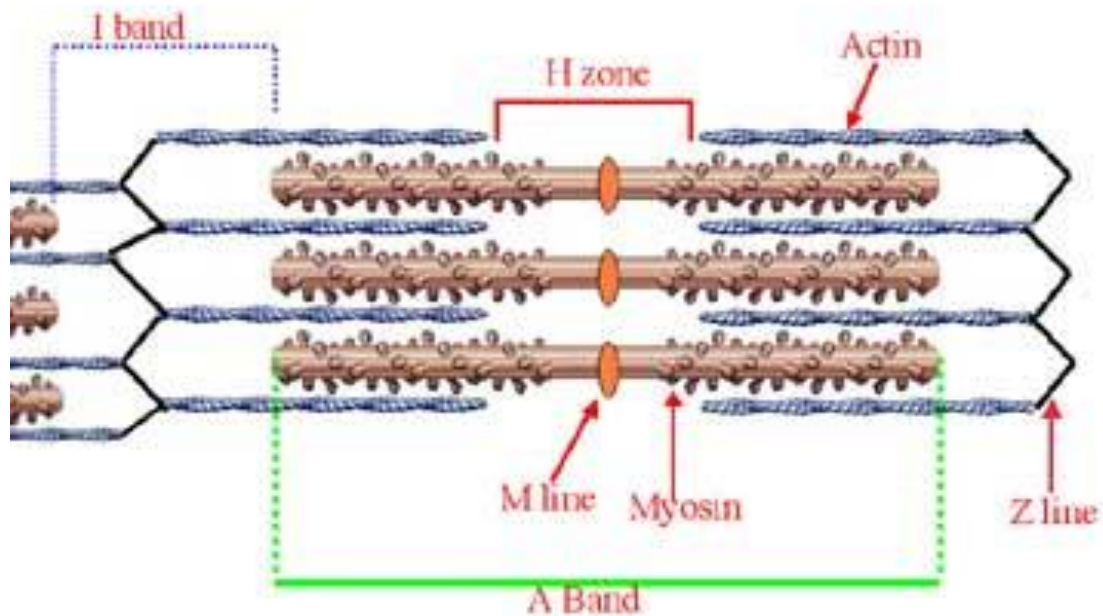


Sarcomere



Attach-Pivot-Detach-Return

Sliding filament theory explained

1. **Calcium** is released from the **sarcoplasmic reticulum**
2. **Calcium** bonds to **troponin** and turns the **tropomyosin** exposing the active site.
3. **Myosin** head **ATTACHES** to the **tropomyosin**
4. The **Myosin** head **PIVOTS** pulling the **actin** over the **myosin** (SLIDING). **ATP IS NEEDED**.
5. The myosin head **DETACHES** and **RETURNS** to the resting phase. **ATP IS NEEDED**.
6. If **calcium** is still present, the cycle will continue.